

Abstract

An ultrasonic flow sensor is used in particular for measuring the volumetric or mass flow of a fluid (1) in a pipe (3). The sensor includes at least one ultrasonic transducer (2a through 2n) which is capable of emitting and receiving ultrasonic signals (7). An ultrasonic flow sensor, having in particular a simple and cost-effective construction and which functions according to the principle of beam drift, includes an array (2) of a plurality of ultrasonic transducers (2a through 2n) which is positioned on one side of the pipe (3), a reflective surface (4) lying opposite the array (2) on which the emitted ultrasonic signals (7) are reflected, and a receiver electronic system (6) which evaluates the ultrasonic signal (9) received from the ultrasonic transducers (2a through 2n).

Figure 1